Title (en)

Inverter with incorporated filter circuit and improved component cooling arrangement

Title (de)

Wechselrichter mit eingebauter Filterschaltung und verbesserter Bauteilkühleinrichtung

Title (fr)

Onduleur avec filtre incorporé et dispositif de refroidissement des composants amélioré

Publication

**EP 0854565 A2 19980722 (EN)**

Application

**EP 98300388 A 19980120**

Priority

- JP 751397 A 19970120
- JP 1099197 A 19970124

Abstract (en)

An inverter includes a rectifier circuit (12), an inverter circuit (15), a filter circuit (19) including an input side capacitor (24), a coil (25a; 25b; 25c), and an output side capacitor (26), the filter circuit (19) being disposed at a front stage of the rectifier circuit (12), a casing (36) accommodating the inverter circuit (15), the rectifier circuit (12) and the filter circuit (19), a first cooling chamber (65) defined in the casing (36), a second cooling chamber (66) defined in the casing (36) and partitioned by a partition wall (64) from the first cooling chamber (65) so as to be adjacent to it, a plurality of vent holes (67, 68) formed in the partition wall (64), and a fan (39) for supplying a cooling air into the first cooling chamber (65) and further via the vent holes (67, 68) into the second cooling chamber (66). The inverter circuit (15) is cooled by the cooling air flowing into the first cooling chamber (65) and the coil (25a; 25b; 25c) of the filter circuit (19) is cooled by the cooling air flowing through the second cooling chamber (66).

IPC 1-7

**H02M 7/48**

IPC 8 full level

**H02M 7/00** (2006.01)

CPC (source: EP KR US)

**H01F 17/062** (2013.01 - EP); **H02M 1/0064** (2021.05 - KR); **H02M 1/42** (2013.01 - KR); **H02M 7/003** (2013.01 - EP KR US); **H05K 7/20909** (2013.01 - EP KR US)

Cited by

EP2006986A1; EP1309075A3; EP2020739A3; EP4273895A1; GB2336254A; GB2336254B; EP2642131A3; US11013153B2; EP3518639A1; WO2004055965A1; US7345561B2; US7714686B2; US7817406B2

Designated contracting state (EPC)

CH DE ES FR GB IT LI SE

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DOCDB simple family (application)

**EP 98300388 A 19980120**; CN 98104281 A 19980119; DE 69822682 T 19980120; ES 98300388 T 19980120; KR 19980001418 A 19980119; TW 87100382 A 19980113; US 158697 A 19971231